FIG.1

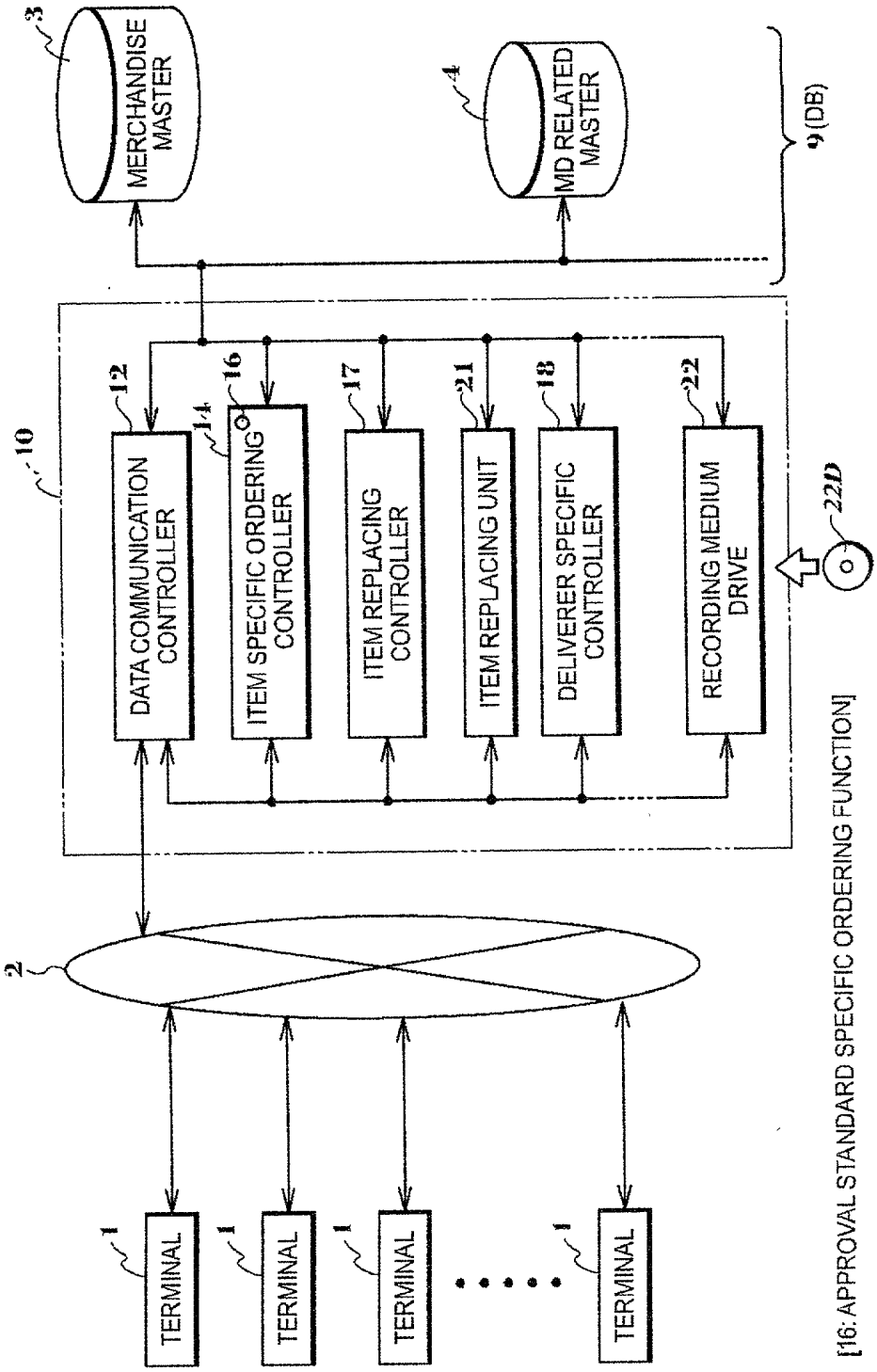

3
MERCHANDISE MASTER
4
MD RELATED MASTER
9 (DB)
10
12
DATA COMMUNICATION CONTROLLER
14
16
ITEM SPECIFIC ORDERING CONTROLLER
17
ITEM REPLACING CONTROLLER
21
ITEM REPLACING UNIT
18
DELIVERER SPECIFIC CONTROLLER
22
RECORDING MEDIUM DRIVE
22D
2
1
TERMINAL
TERMINAL
TERMINAL
TERMINAL
[16: APPROVAL STANDARD SPECIFIC ORDERING FUNCTION]

FIG.2

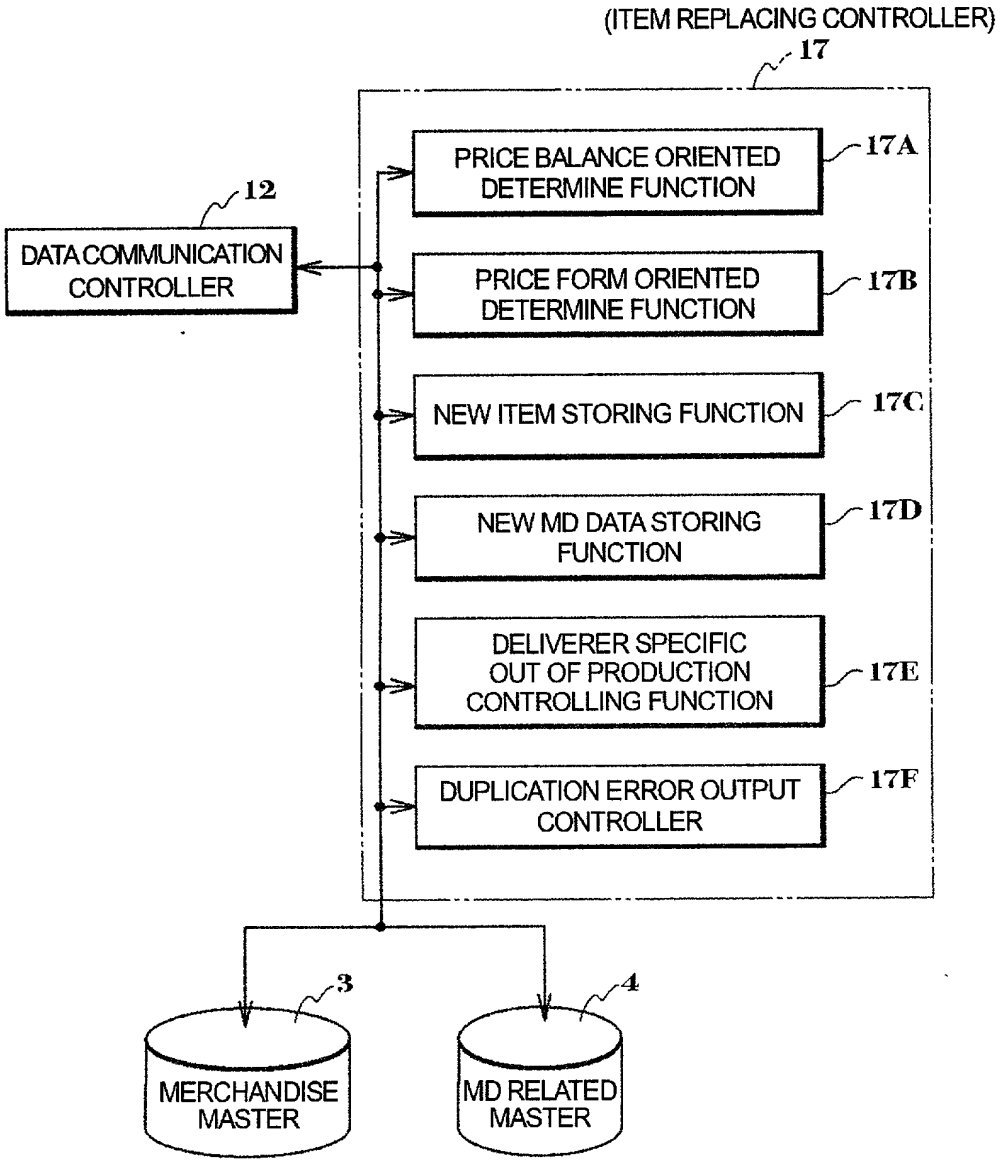

(ITEM REPLACING CONTROLLER)
17
PRICE BALANCE ORIENTED DETERMINE FUNCTION
17A
12
DATA COMMUNICATION CONTROLLER
PRICE FORM ORIENTED DETERMINE FUNCTION
17B
NEW ITEM STORING FUNCTION
17C
NEW MD DATA STORING FUNCTION
17D
DELIVERER SPECIFIC OUT OF PRODUCTION CONTROLLING FUNCTION
17E
DUPLICATION ERROR OUTPUT CONTROLLER
17F
3
4
MERCHANDISE MASTER
MD RELATED MASTER

FIG.3

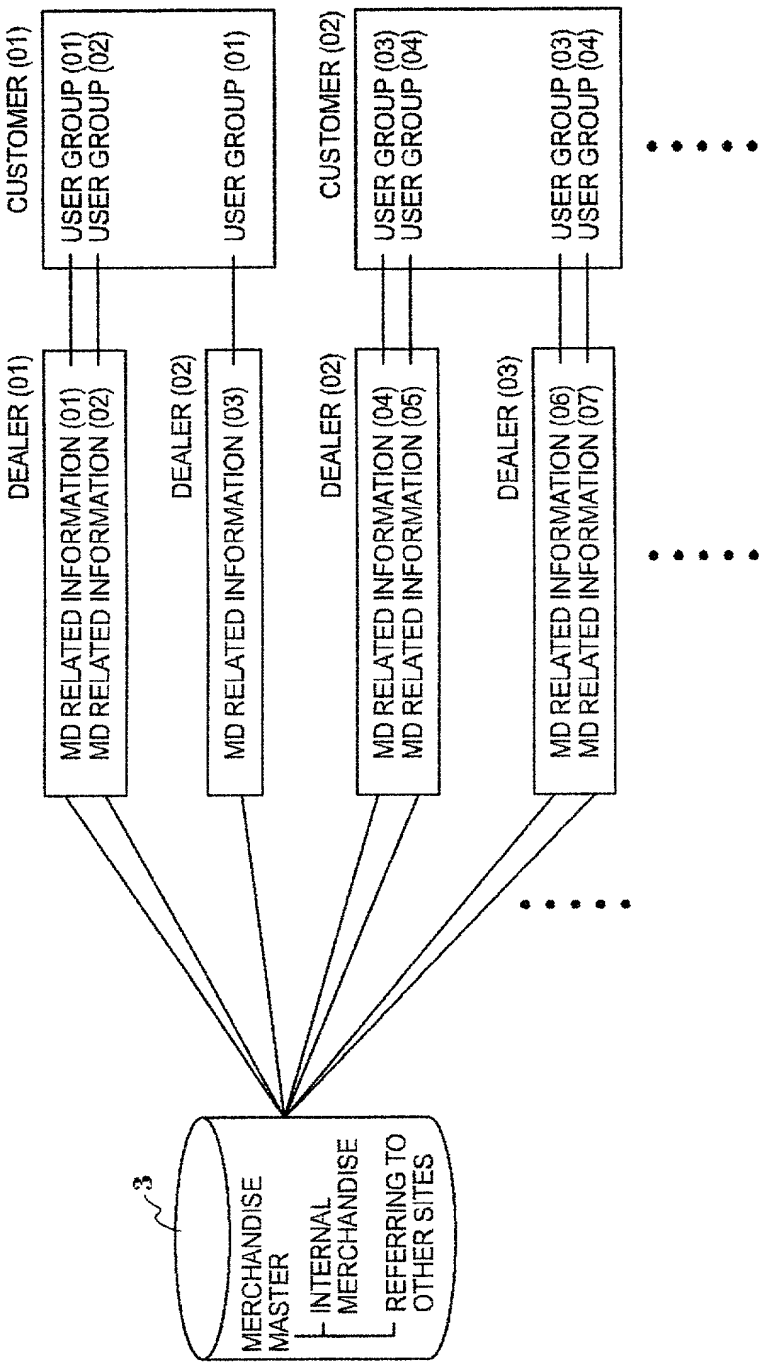

CUSTOMER (01)
USER GROUP (01)
USER GROUP (02)
USER GROUP (01)
CUSTOMER (02)
USER GROUP (03)
USER GROUP (04)
USER GROUP (03)
USER GROUP (04)
DEALER (01)
MD RELATED INFORMATION (01)
MD RELATED INFORMATION (02)
DEALER (02)
MD RELATED INFORMATION (03)
DEALER (02)
MD RELATED INFORMATION (04)
MD RELATED INFORMATION (05)
DEALER (03)
MD RELATED INFORMATION (06)
MD RELATED INFORMATION (07)
3
MERCHANDISE MASTER
INTERNAL MERCHANDISE
REFERRING TO OTHER SITES

FIG.4

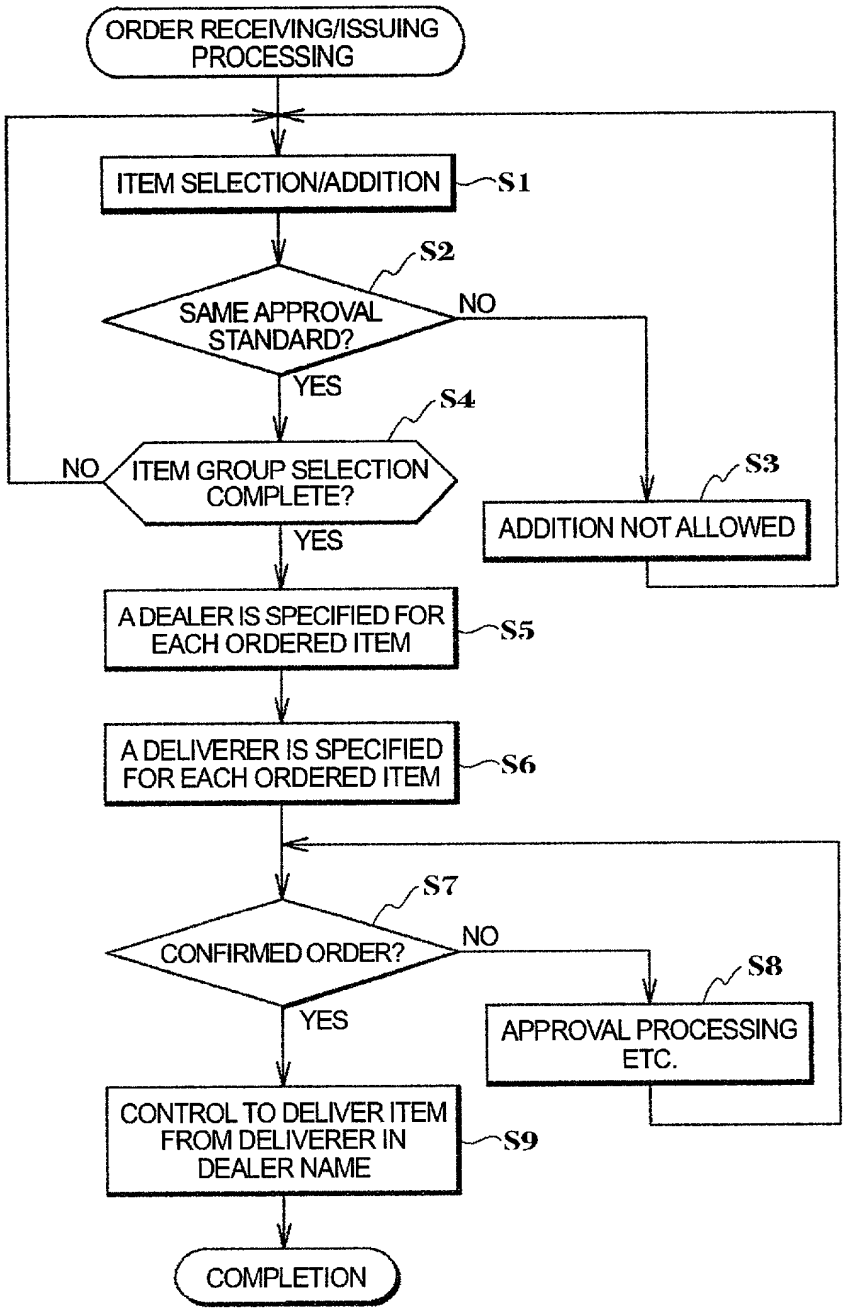

ORDER RECEIVING/ISSUING PROCESSING
ITEM SELECTION/ADDITION
S1
S2
SAME APPROVAL STANDARD?
NO
YES
S4
NO
ITEM GROUP SELECTION COMPLETE?
S3
ADDITION NOT ALLOWED
YES
A DEALER IS SPECIFIED FOR EACH ORDERED ITEM
S5
A DELIVERER IS SPECIFIED FOR EACH ORDERED ITEM
S6
S7
CONFIRMED ORDER?
NO
S8
YES
APPROVAL PROCESSING ETC.
CONTROL TO DELIVER ITEM FROM DELIVERER IN DEALER NAME
S9
COMPLETION

FIG.5

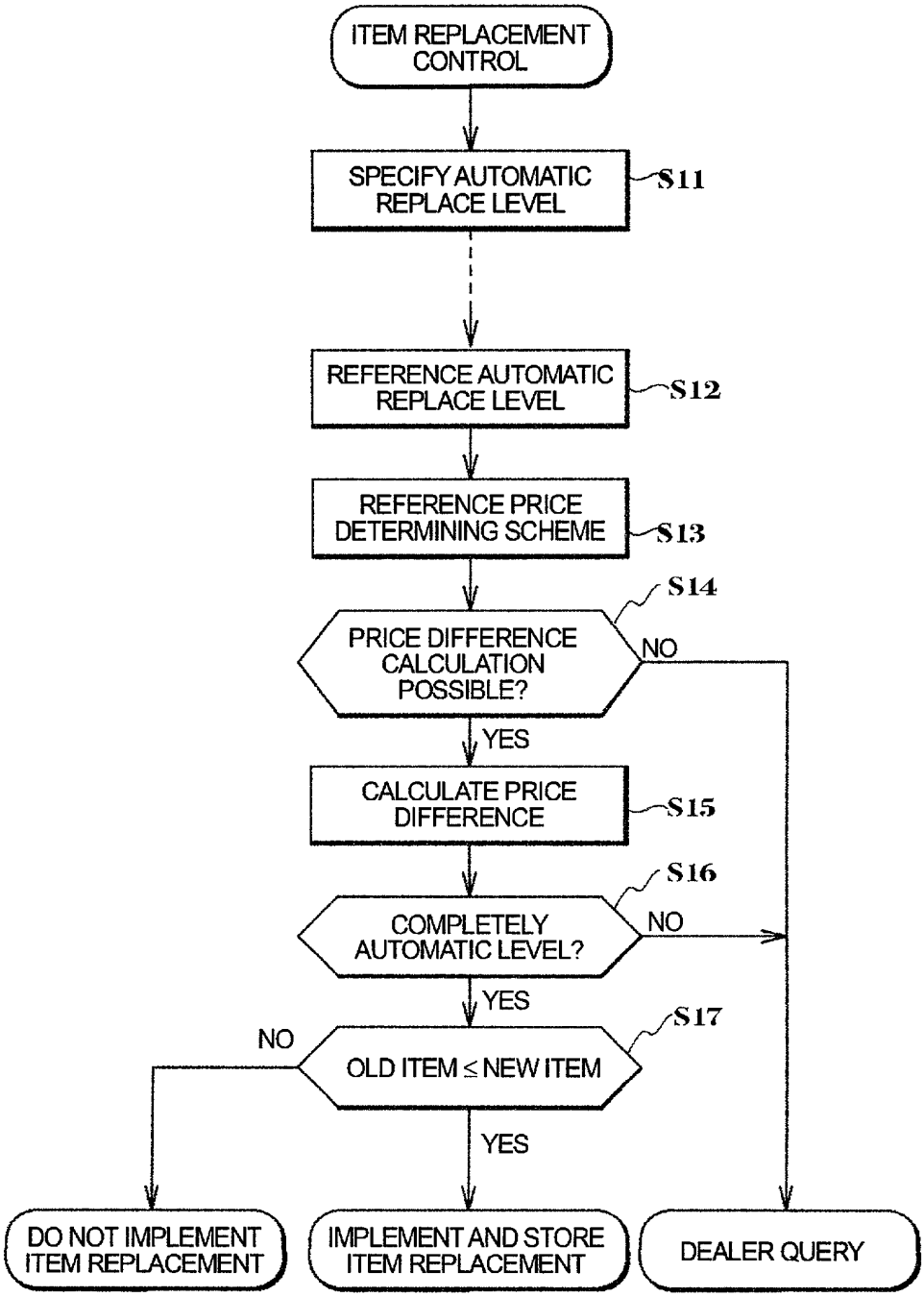

ITEM REPLACEMENT CONTROL
SPECIFY AUTOMATIC REPLACE LEVEL
S11
REFERENCE AUTOMATIC REPLACE LEVEL
S12
REFERENCE PRICE DETERMINING SCHEME
S13
S14
PRICE DIFFERENCE CALCULATION POSSIBLE?
NO
YES
CALCULATE PRICE DIFFERENCE
S15
S16
COMPLETELY AUTOMATIC LEVEL?
NO
YES
S17
NO
OLD ITEM ≤ NEW ITEM
YES
DO NOT IMPLEMENT ITEM REPLACEMENT
IMPLEMENT AND STORE ITEM REPLACEMENT
DEALER QUERY

FIG.6

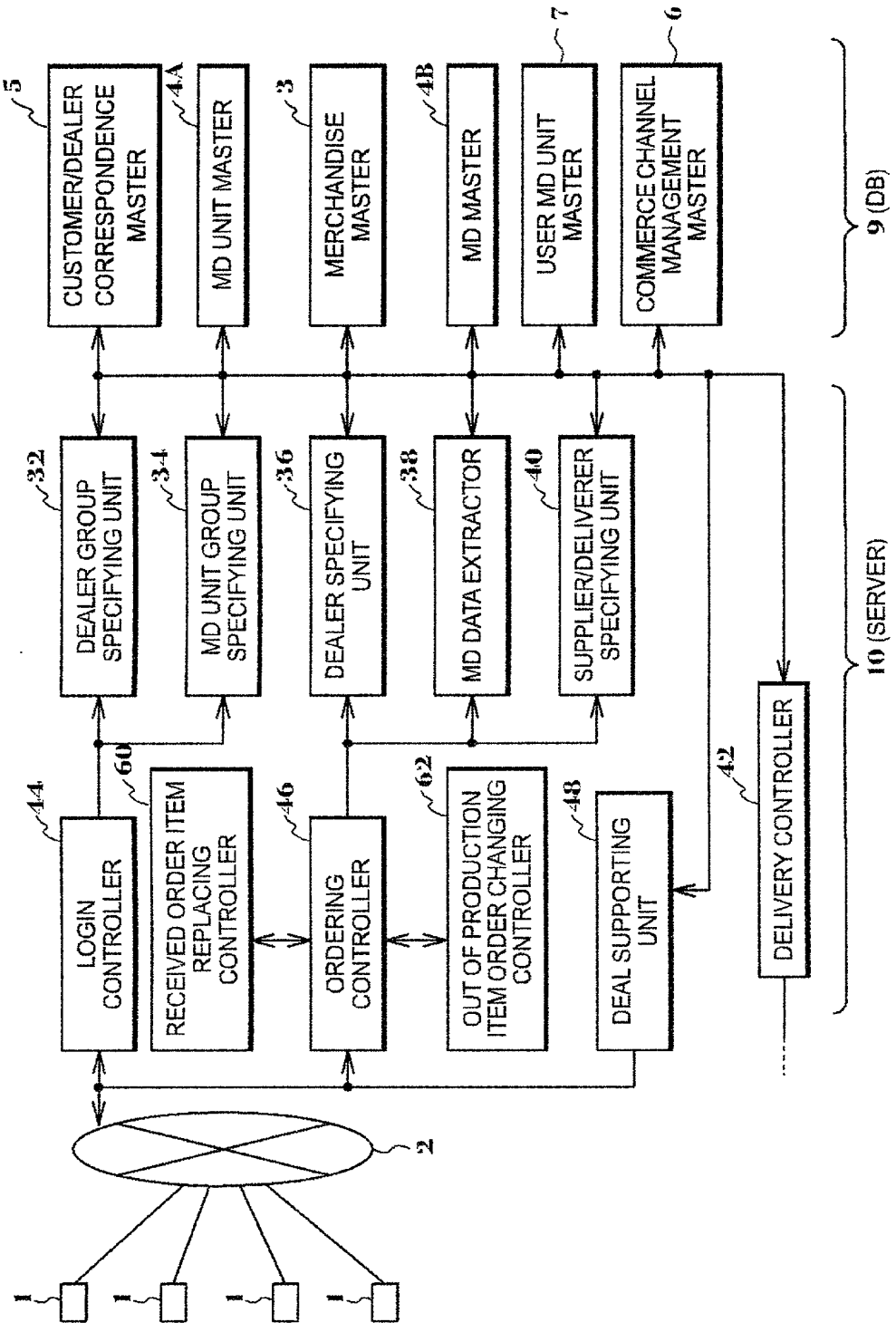

1
2
LOGIN CONTROLLER
44
RECEIVED ORDER ITEM REPLACING CONTROLLER
60
ORDERING CONTROLLER
46
OUT OF PRODUCTION ITEM ORDER CHANGING CONTROLLER
62
DEAL SUPPORTING UNIT
48
DELIVERY CONTROLLER
42
DEALER GROUP SPECIFYING UNIT
32
MD UNIT GROUP SPECIFYING UNIT
34
DEALER SPECIFYING UNIT
36
MD DATA EXTRACTOR
38
SUPPLIER/DELIVERER SPECIFYING UNIT
40
10 (SERVER)
CUSTOMER/DEALER CORRESPONDENCE MASTER
5
MD UNIT MASTER
4A
MERCHANDISE MASTER
3
MD MASTER
4B
USER MD UNIT MASTER
7
COMMERCE CHANNEL MANAGEMENT MASTER
6
9 (DB)

FIG.7

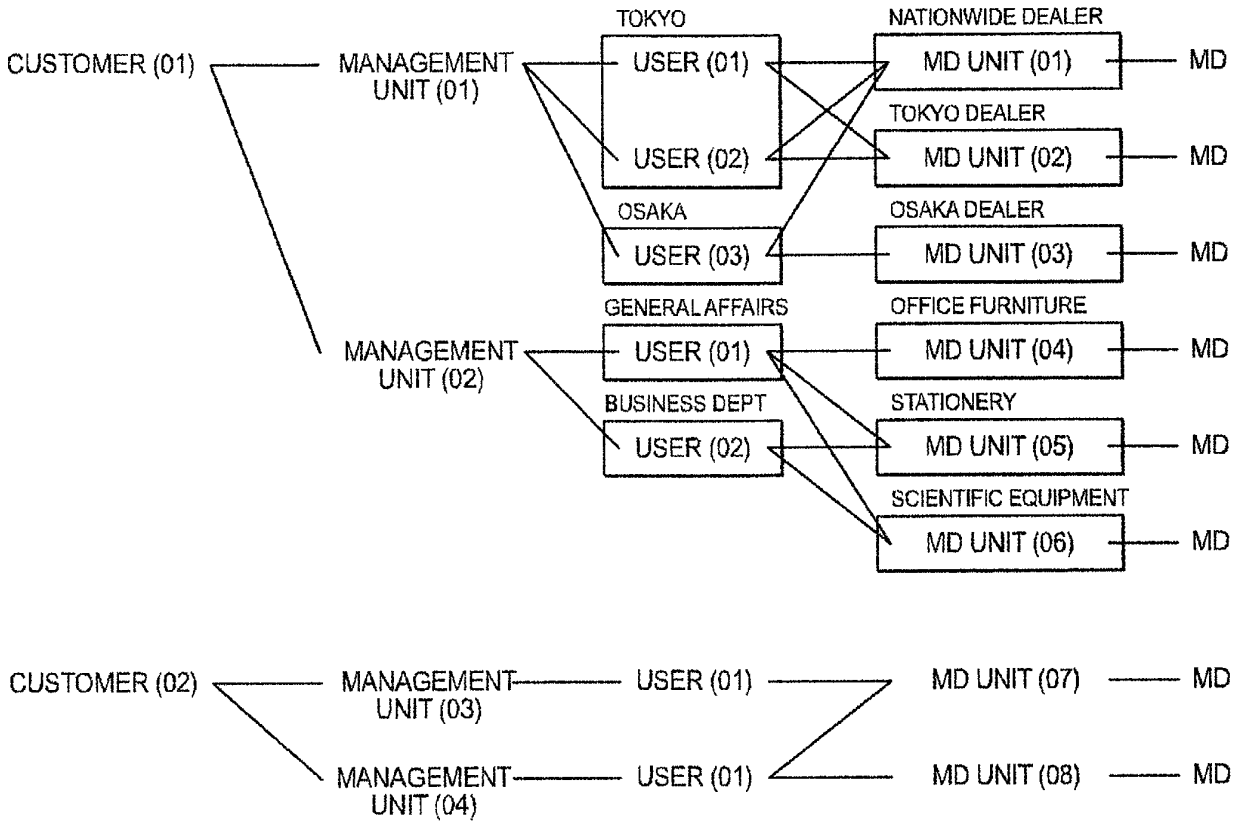

CUSTOMER (01)
MANAGEMENT UNIT (01)
TOKYO
USER (01)
USER (02)
OSAKA
USER (03)
NATIONWIDE DEALER
MD UNIT (01)
MD
TOKYO DEALER
MD UNIT (02)
MD
OSAKA DEALER
MD UNIT (03)
MD
MANAGEMENT UNIT (02)
GENERAL AFFAIRS
USER (01)
BUSINESS DEPT
USER (02)
OFFICE FURNITURE
MD UNIT (04)
MD
STATIONERY
MD UNIT (05)
MD
SCIENTIFIC EQUIPMENT
MD UNIT (06)
MD
CUSTOMER (02)
MANAGEMENT UNIT (03)
USER (01)
MD UNIT (07)
MD
MANAGEMENT UNIT (04)
USER (01)
MD UNIT (08)
MD

**FIG.8**

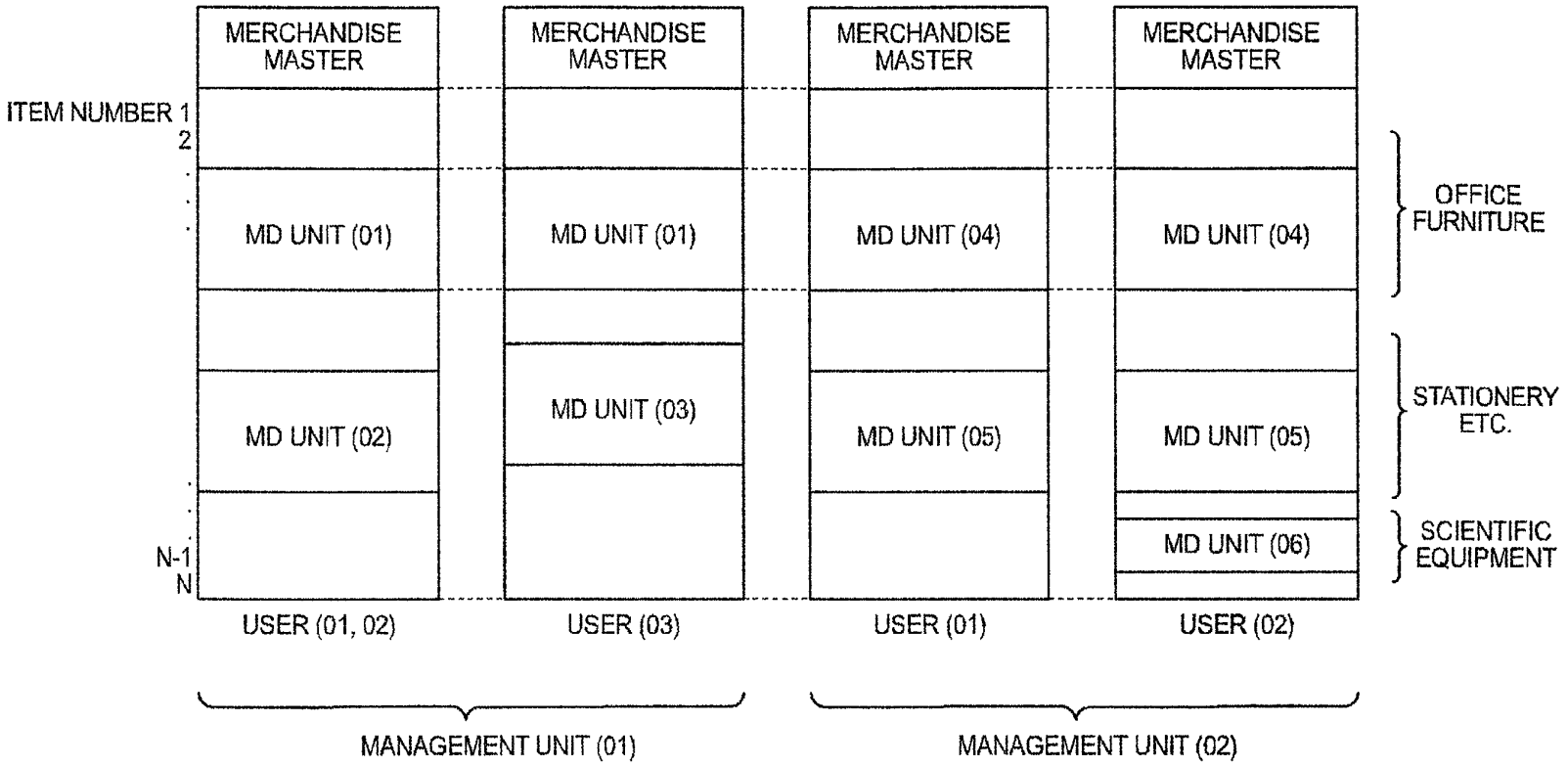

MERCHANDISE MASTER
MERCHANDISE MASTER
MERCHANDISE MASTER
MERCHANDISE MASTER
ITEM NUMBER 1
2
MD UNIT (01)
MD UNIT (01)
MD UNIT (04)
MD UNIT (04)
OFFICE FURNITURE
MD UNIT (02)
MD UNIT (03)
MD UNIT (05)
MD UNIT (05)
STATIONERY ETC.
MD UNIT (06)
SCIENTIFIC EQUIPMENT
N-1
N
USER (01, 02)
USER (03)
USER (01)
USER (02)
MANAGEMENT UNIT (01)
MANAGEMENT UNIT (02)

FIG.9

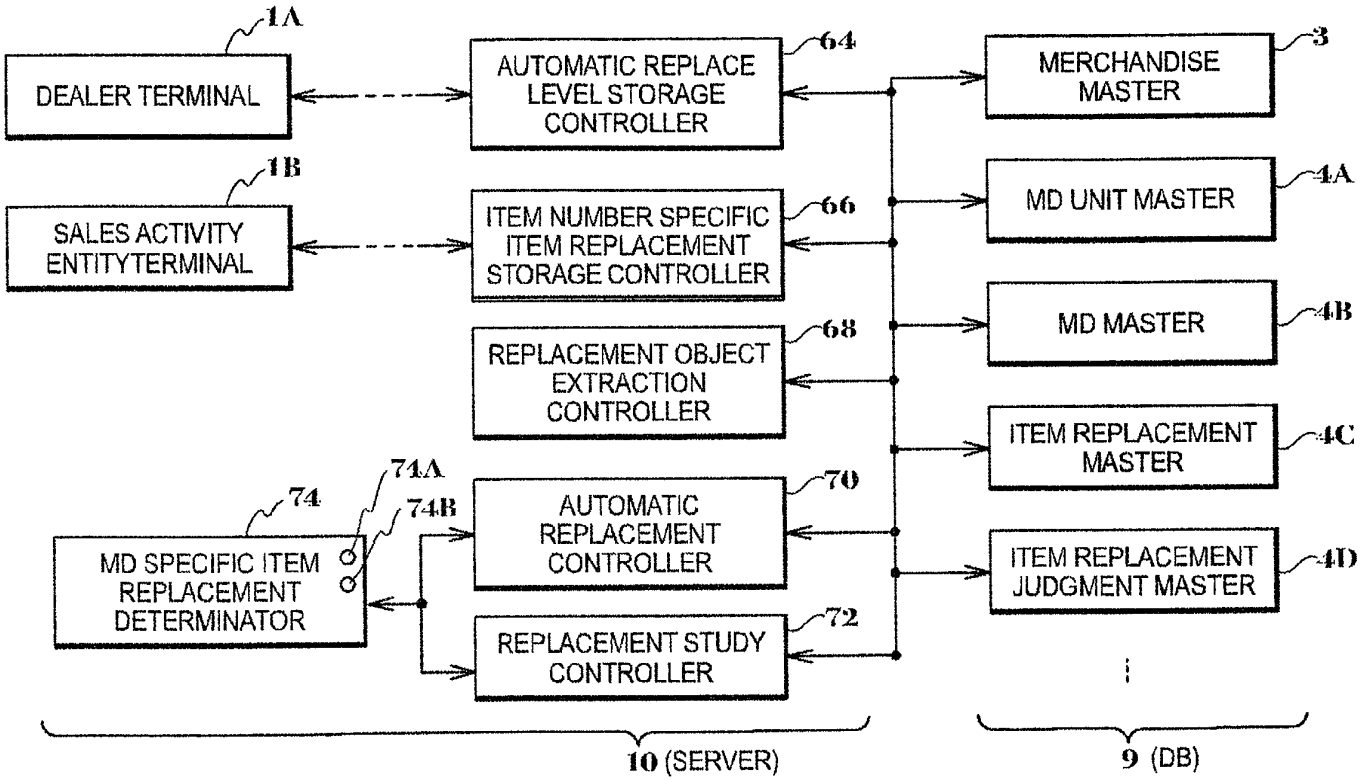

1A
DEALER TERMINAL
1B
SALES ACTIVITY ENTITYTERMINAL
64
AUTOMATIC REPLACE LEVEL STORAGE CONTROLLER
66
ITEM NUMBER SPECIFIC ITEM REPLACEMENT STORAGE CONTROLLER
68
REPLACEMENT OBJECT EXTRACTION CONTROLLER
74
74A
74B
MD SPECIFIC ITEM REPLACEMENT DETERMINATOR
70
AUTOMATIC REPLACEMENT CONTROLLER
72
REPLACEMENT STUDY CONTROLLER
3
MERCHANDISE MASTER
4A
MD UNIT MASTER
4B
MD MASTER
4C
ITEM REPLACEMENT MASTER
4D
ITEM REPLACEMENT JUDGMENT MASTER
10 (SERVER)
9 (DB)

FIG.10

| AUTOMATIC IMPLEMENTATION LEVEL | APPLICABLE RATE | (PRICE INCREASE) | (SAME PRICE) | (PRICE REDUCTION) |
|---|---|---|---|---|
| VERIFICATION SCHEME | | PRICE SET BY DEALER | EXECUTE AUTOMATIC REPLACEMENT | PRICE SET BY DEALER |
| INTERMEDIATE SCHEME | YES | CALCULATE PRICE, EXECUTE AUTOMATIC REPLACEMENT | EXECUTE AUTOMATIC REPLACEMENT | CALCULATE PRICE, EXECUTE AUTOMATIC REPLACEMENT |
| | NO | PRICE SET BY DEALER | EXECUTE AUTOMATIC REPLACEMENT | PRICE SET BY DEALER |
| AUTOMATIC SCHEME | YES | DO NOT EXECUTE AUTOMATIC REPLACEMENT | EXECUTE AUTOMATIC REPLACEMENT | EXECUTE AUTOMATIC REPLACEMENT (CALCULATE PRICE BY RATE) |
| | NO | DO NOT EXECUTE AUTOMATIC REPLACEMENT | EXECUTE AUTOMATIC REPLACEMENT | EXECUTE AUTOMATIC REPLACEMENT (SAME PRICE AS OLD ITEM PRICE) |

FIG.11(A)

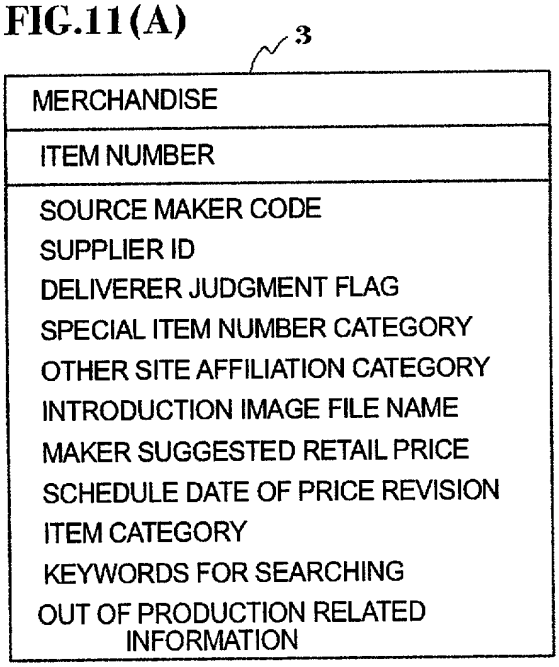



FIG.11(B)

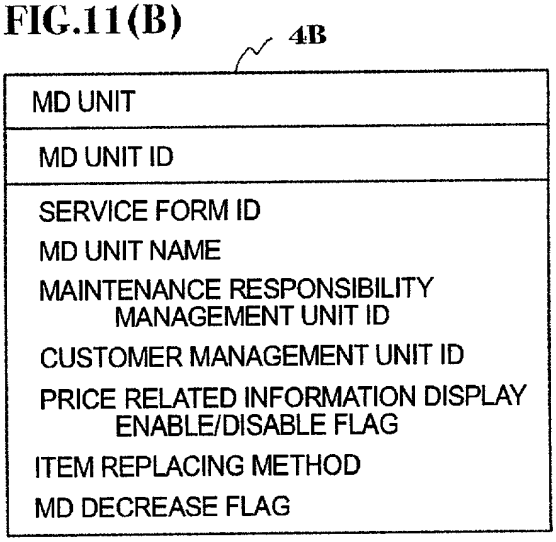



FIG.11(C)

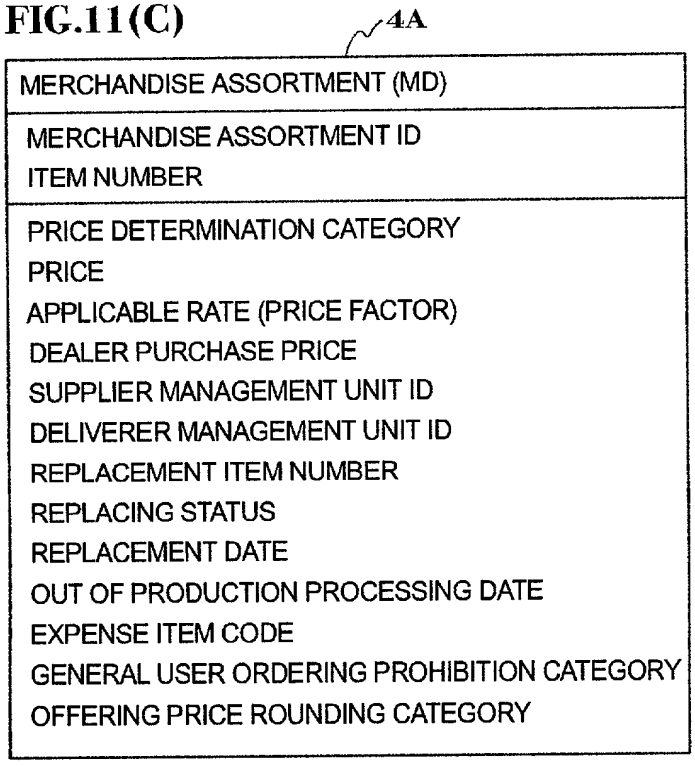


FIG.12 (A)

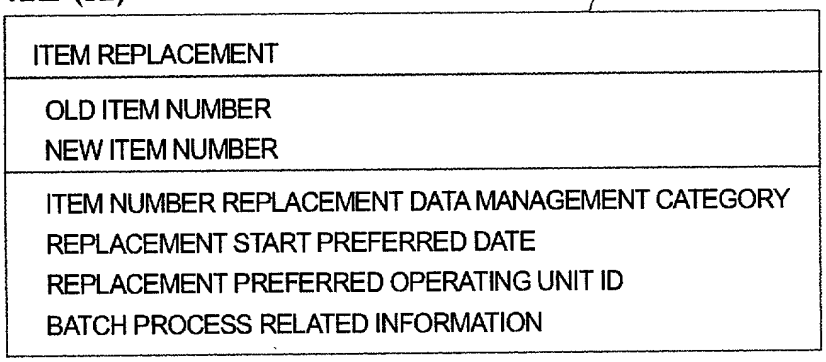



FIG.12 (B)

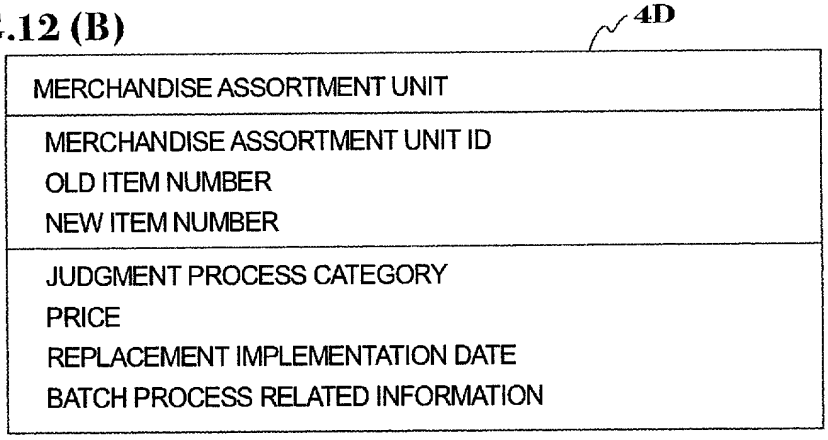


FIG.13 (A)

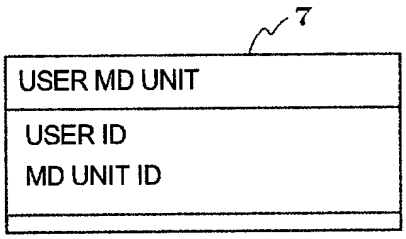



FIG.13 (B)

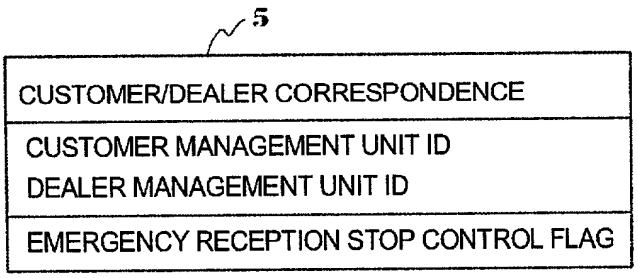



FIG.13 (C)

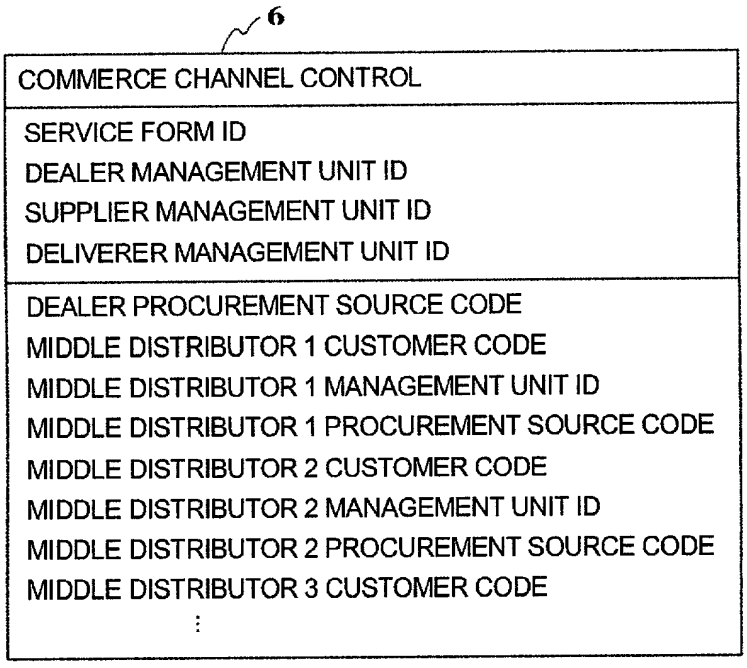


FIG.14 (A)

50

| CUSTOMER |
| --- |
| MANAGEMENT UNIT ID |
| SERVICE FORM ID<br>CUSTOMER MANAGEMENT UNIT NAME<br>CONTACT DESTINATION SUCH AS ADDRESS<br>USER ACCEPTANCE CATEGORY<br>WELCOME SIGNBOARD IMAGE FILE NAME<br>DELIVERY DATE DISPLAY/NONDISPLAY FLAG<br>PRICE ETC. DISPLAY/NONDISPLAY FLAG<br>GENERAL USER ORDERING PROHIBITED ITEM NAME INFORMATION<br>INITIAL SCREEN ADDRESS (URL)<br>MANAGEMENT UNIT HOLIDAY FLAG |

FIG.14 (B)

52

| USER |
| --- |
| USER ID |
| MANAGEMENT UNIT ID<br>USER NAME<br>DIRECT DELIVERY DESTINATION ID<br>BILLING DESTINATION ID<br>BUDGET CONTROL UNIT ID<br>PASSWORD<br>ORDERING PROHIBITED ITEM ORDERING AUTHORIZATION FLAG<br>USER HOLIDAY FLAG |

FIG.15

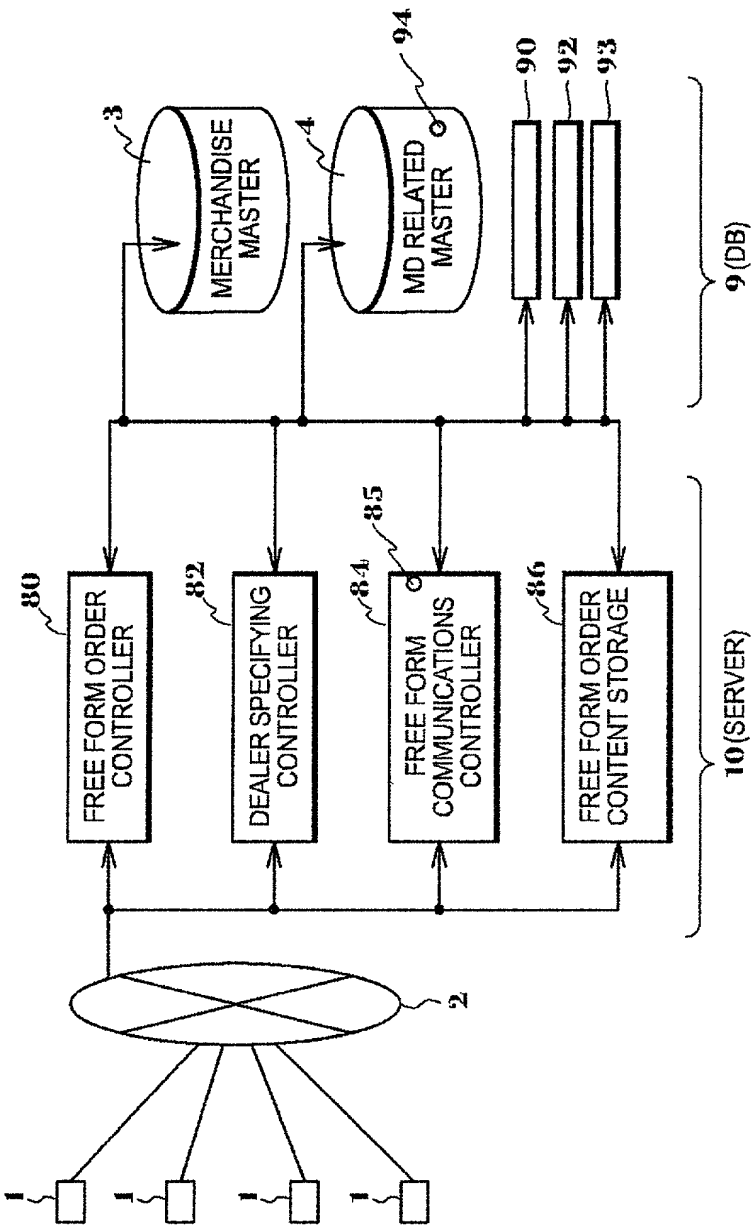
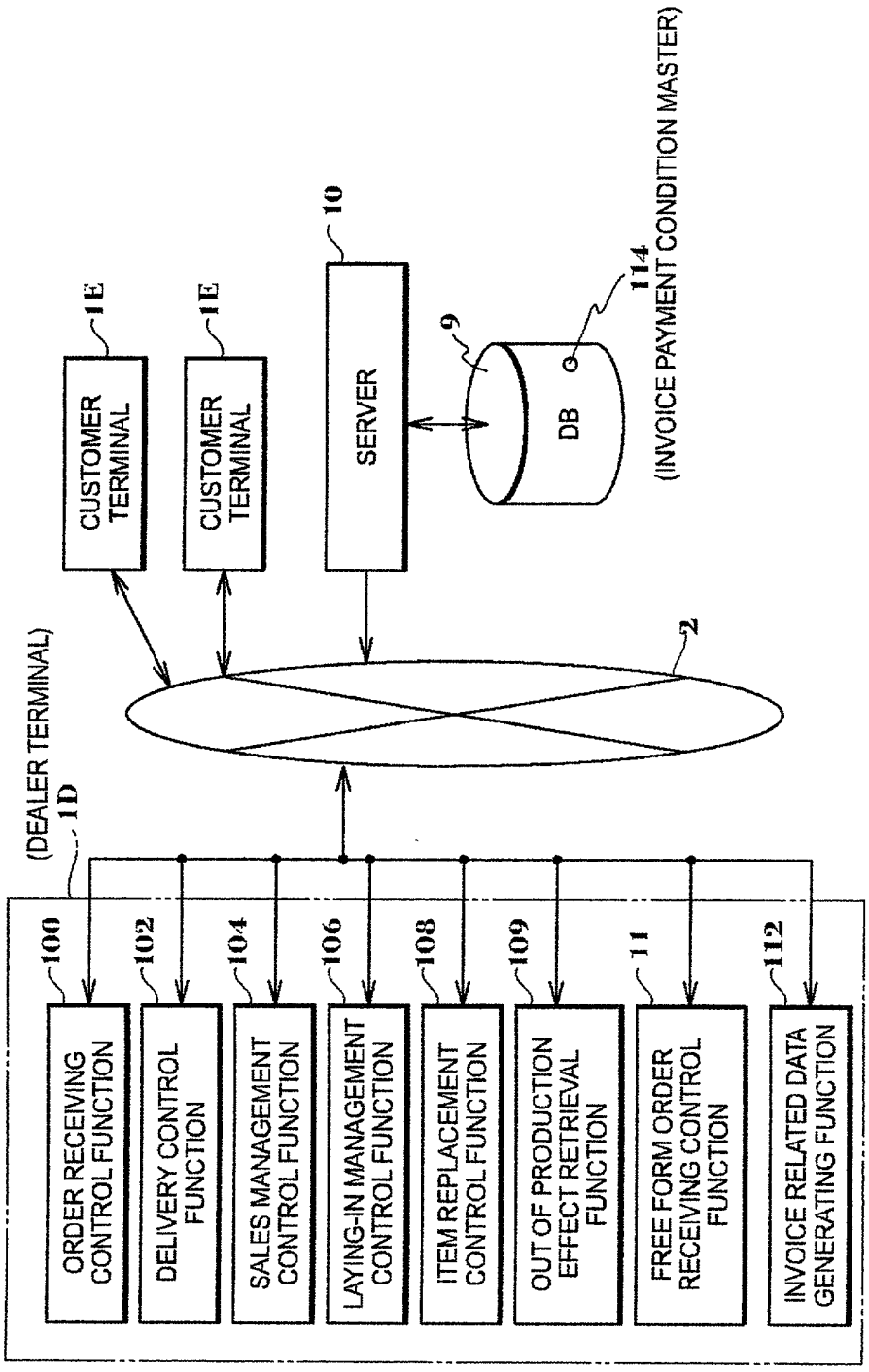

1
1
1
1
2
80
FREE FORM ORDER CONTROLLER
82
DEALER SPECIFYING CONTROLLER
84
85
FREE FORM COMMUNICATIONS CONTROLLER
86
FREE FORM ORDER CONTENT STORAGE
10(SERVER)
3
MERCHANDISE MASTER
4
MD RELATED MASTER
94
90
92
93
9(DB)

FIG.16


(DEALER TERMINAL)
1D
CUSTOMER TERMINAL
1E
CUSTOMER TERMINAL
1E
SERVER
10
DB
9
114
(INVOICE PAYMENT CONDITION MASTER)
2
ORDER RECEIVING CONTROL FUNCTION
100
DELIVERY CONTROL FUNCTION
102
SALES MANAGEMENT CONTROL FUNCTION
104
LAYING-IN MANAGEMENT CONTROL FUNCTION
106
ITEM REPLACEMENT CONTROL FUNCTION
108
OUT OF PRODUCTION EFFECT RETRIEVAL FUNCTION
109
FREE FORM ORDER RECEIVING CONTROL FUNCTION
11
INVOICE RELATED DATA GENERATING FUNCTION
112